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Rhyacophila schmidinarica, a new species of the *philopotamoides* group (Trichoptera: Rhyacophilidae) from the northern Balkan Peninsula.

Gorazd URBANIČ, Ciril KRUŠNIK & Hans MALICKY

Abstract. Material from Slovenia included *Rhyacophila hirticornis* and *R.schmidinarica* which is described and figured here. The figure of „*R.hirticornis*“ of SCHMID (1970) is not *hirticornis* but the new species.

Introduction

MCLACHLAN (1879) described and figured *Rhyacophila hirticornis* which is a well-known Central European species. SCHMID (1970), in his revision of the genus, figured a specimen (Fig. 5) which differed from the figure (Fig. 4) by MCLACHLAN, but most readers accepted the possibility of a certain variation, so that SCHMID'S figure was included in the European Trichoptera Atlas by MALICKY (1983:15) under the name of *R.hirticornis*.

During our study of material from Slovenia, we noticed two clearly different species. The first was found in the Alpine region (Kranjska Gora), in the Pohorje mountains at 5 sites, in the sub-pannonian region (springs of rivers Ščavnica and Ročica) and at the southeastern edge of the Karst (streams Krvavi potok and Glinščica). The males of this species (Fig. 1, 2) corresponded with the figure by McLachlan (1879, plate XLIX) and with specimens from many places in Austria, Hungary, Switzerland and southern Germany in the collection of the third author. MCLACHLAN'S description was based on specimens from Zürich (Switzerland), „Steyer“ (=Steyr) (Austria), Wurzenpab (Carinthia), „Siskär Berg“ and Görz (=Gorica) (Carniola; now Slovenia).

The second species was found in the Dinaric region (Podplana and Žlebič), which corresponds with the figures given by SCHMID (1970) and MALICKY (1983).

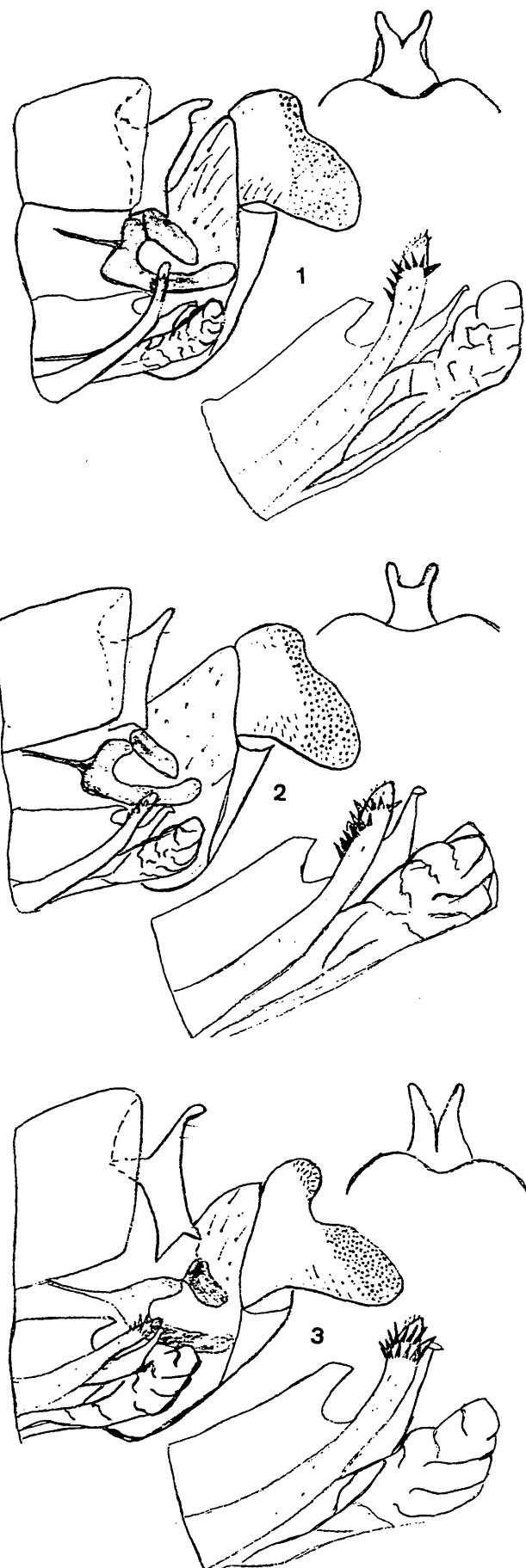
Rhyacophila schmidinarica nov.spec.

Male: Head, palps, thoracic sclerites and coxae brown. Antennae, femora, tibiae and tarsi yellowish brown. A ventral tooth on abdominal segments 6 and 7. Forewing brown with whitish costal area. Length of anterior wing 11 – 12,5 mm. Male genitalia (Fig.3): Segment 10 deeply incised in dorsal view. Second segment of inferior appendages with deeply excised apical margin. Phallic apparatus similar to *R.hirticornis*, but parameres laterally with two sub-apical rows of long spines. Apices of parameres covered with short, small spines, which are also randomly distributed all over the paramere. Female: As in the male, but only one ventral tooth on segment 7. Forewing length 11,5 – 12 mm. Genitalia according to fig.8.

R.schmidinarica n.sp. is distinguished from *R.hirticornis* by (1) the form of the second segment of the inferior appendage: the upper edge is continued in a short, blunt finger, followed by a deep excision of the apical edge; in *hirticornis* there is not a finger but a broad, rounded lobe, and the excision of the apical edge is shallow. (2) the excision of segment 10 in dorsal view in our specimens is deeper than in *hirticornis*, but apparently not in the specimen figured by SCHMID (1970). (3) the long subapical spines on the parameres are arranged in two rows in *schmidinarica*, but in *hirticornis* the lower row is shorter so that the spines are arranged in one and half rows or only one row (in the specimen from Karst). Also the female terminalia show slight differences (Fig.7, 8).

Material: Holotype ♂: Slovenia, Podplana, 19.5.1983, leg.I.Kos, coll.Krušnik. Paratypes: Podplana, 22.5.1983, 1 ♀. Žlebič, 11.5.1983, 1 ♂; 29.5.1983, 1 ♀; 5.6.1983, 1 ♂; all leg.I.Kos, coll.Krušnik. Paratype: Crna Gora, Durmitor, Tara, 13.7.1981, 1 ♂, leg.I.Sivec, coll.Malicky.

Fig. 1-2: male genitalia of *R.hirticornis*: 1 from Glinščica (Karst), 2 from Pohorje. Fig. 3: male genitalia of *R.schmidinarica* from Podplana.



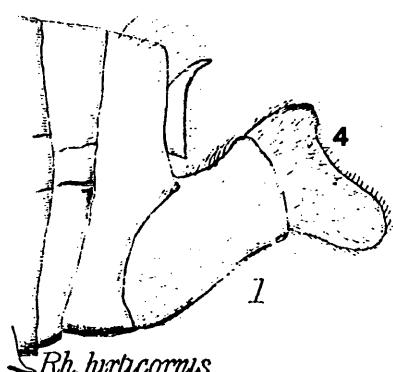


Fig. 4: Male genitalia of *R. hirticornis*: figure from MCLACHLAN.

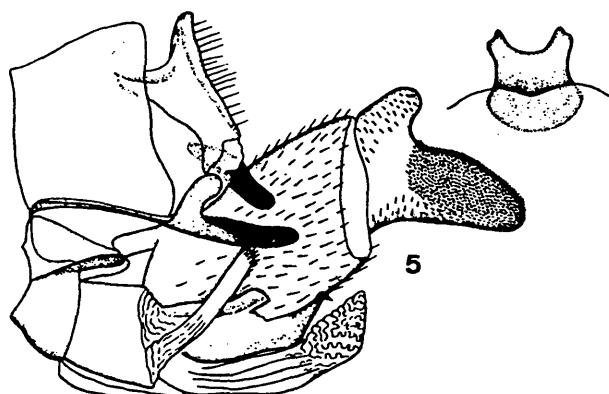


Fig. 5: Male genitalia of *R. schmidinarica*: figure from SCHMID (under the name of *hirticornis*).

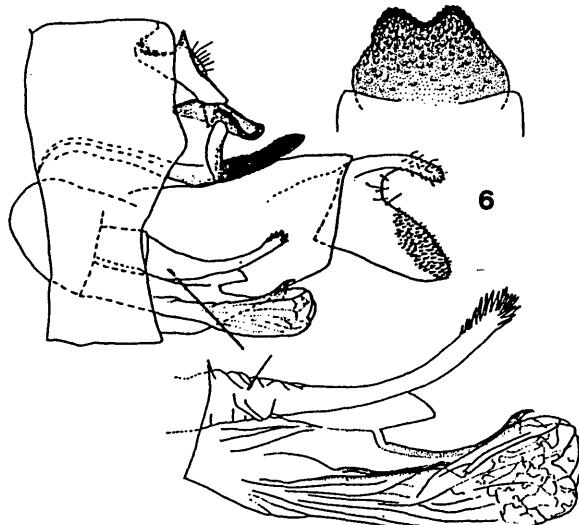
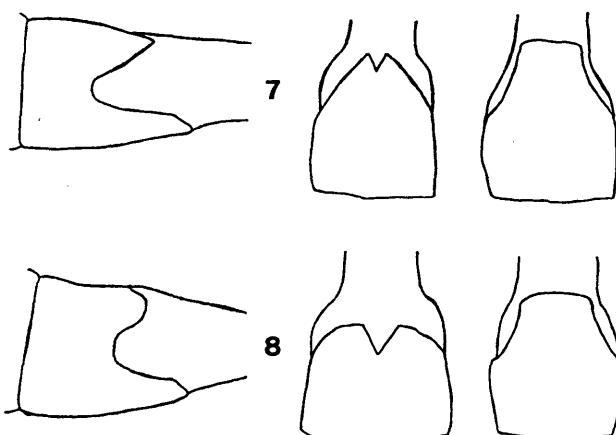


Fig. 6: Male genitalia of *R. orobica*: figure from MORETTI.

The specimen figured by SCHMID under the name *hirticornis* came from "Brusanje, Alpes dinariques, Yougoslavie" which is probably Bršane near Gospic, western Croatia.

A similar insect was described by MORETTI (1991) from northern Italy as *Rhyacophila hirticornis orobica*. In our opinion, *orobica* merits the rank of a good species. It lives in northern Italy, in the region of Bergamo, and southern Switzerland (Ticino: Meride; MALICKY, unpublished). According to the description and the figures (Fig. 6), *R. orobica* is clearly different from both *hirticornis* and *schmidinarica*: (1) The distal finger in continuation of the dorsal edge of the second segment of the inferior appendage is long and slender, and the following excision of the apical edge is even deeper than in *schmidinarica*, (2) segment 10 in dorsal view is broad and blunt, and hardly excised apically, (3) the spines of the parameres are in an apical and not in a sub-apical position.



Figs. 7-8: female genitalia, 7: *R. hirticornis*, 8: *R. schmidinarica*.

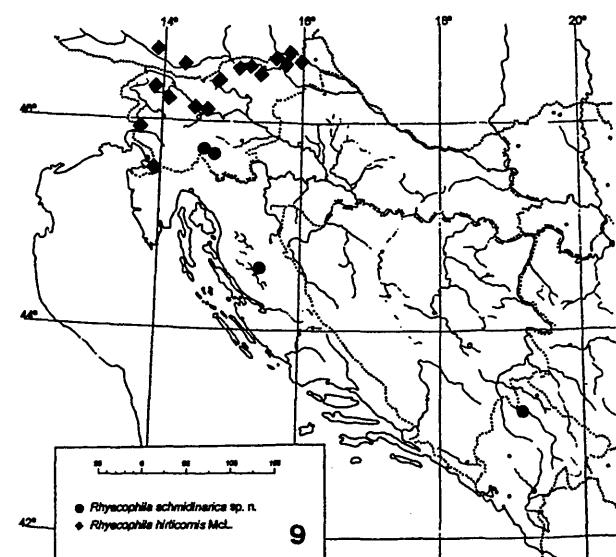


Fig. 9: Distribution of the two species in Slovenia and adjacent regions.

References

MALICKY, H., 1983, Atlas of European Trichoptera. Junk, The Hague.

MCLACHLAN, R., 1874-1880, A monographic revision and synopsis of the Trichoptera of the European fauna. Reprint 1968, Classey.

MORETTI, G.P., 1991, Nouvelles espèces et sous-espèces de trichoptères italiens et exemples de variabilité des populations des Alpes méridionales et des Apennins. – Proc. 6th Int.Symp.Trich.:385-402.

SCHMID, F., 1970, Le genre *Rhyacophila* et la famille des Rhyacophilidae. – Mém.Soc.Ent.Canada 66:1-230.

Addresses of the authors:

Gorazd Urbanič, University of Ljubljana, Biotechnical faculty, Department of Biology, Večna pot 111, SLO – 1001 Ljubljana, Slovenia.

Dr.Ciril Krušnik, National Institute of Biology, Večna pot 111, SLO – 1001 Ljubljana, Slovenia.

Prof.Dr.Hans Malicky, Sonnengasse 13, A – 3293 Lunz am See, Austria.